North America's Leader in Hazardous Material Information Management

1905 Aston Avenue, Carlsbad, CA 92008 Phone (800) 451-8346 Fax (760) 602-8888

MSDS PRODUCT INFORMATION

Date: 10/07/2005

To: MSDS Requester

From: 3E Company

Subject: The MSDS you have requested

[] MSDS NOT REQUIRED

In response to your request for a Material Safety Data Sheet, according to the OSHA Hazard Communicatin Standard (Right-to-Know), the following item is an article. Articles are defined in 29 CFR 1910.1200(c). Products such as Drugs, cosmetics, food, or alcoholic beverages, wood or wood products, and tobacco or tobacco products, as defined in 29 CFR1910.1200(b)(6), are exempt from the Hazard Communication Standard. Items that are considered articles, as defined in 29 CFR 1910.1200(c), are also exempt from this Standard. Therefore, the manufacturer is not required to provide an MSDS for this product.

[] MSDS DISCONTINUED PRODUCT

In response to your request for a Material Safety Data Sheet, the manufacturer has discontinued the product listed below. The MSDS Attached is the most current version, or an MSDS is no longer available.

[] MSDS BEST COPY AVAILABLE

The MSDS attached is the best copy available from the manufacturer.

[X] MANUFACTURER NO LONGER IN BUSINESS

In response to your request for a Material Safety Data Sheet, a current MSDS could not be obtained for this product. It has been determined that the manufacturer listed below is no longer in business. A current address and phone number could not be located.

Manufacturer: Rhone-Poulenc AG

Product Name: Rootone F Rooting Hormone for Rooting Cuttings



Material Safety Data Sheet

Date Prepared:

6/02/97 Supersedes Date:

6/18/96

1. CHEMICAL PRODUCT AND COMPANY DESCRIPTION

RHONE-POULENC AG COMPANY
AGRICULTURAL CHEMICALS
2 T.W. Alexander Drive
Research Triangle Pk NC 27709

Emergency Phone Numbers:

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC (800-424-9300 within the United States or 703-527-3887 for international collect calls) OR RHONE-POULENC (800-334-7577).

For Product Information: (800) 334-9745

Product Status:

FIFRA regulated use only.

EPA FIFRA Registration Number:

264-29

Chemical Name or Synonym:

BIS (DIMETHYLTHIOCARBOMOYL) DISULFIDE; METHYL THIRAM; THIRAM

Molecular Formula:

 $C_{12}H_{11}NO$

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	OSHA		
	CAS Reg Number	Hazard	Percentage
1-NAPHTHALENEACETAMIDE	86-86-2	N	0.067
2-METHYL-1-NAPHTHALENEACETIC ACID	85-08-5	N	0.033
2-METHYL-1-NAPHTHALENEACETAMIDE	85-07-4	N	0.013
INDOLE-3-BUTYRIC ACID	133-32-4	N	0.057
THIRAM	137-26-8	Y	4.0
TALC	14807-96-6	Y	BALANCE



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3. HAZARDS IDENTIFICATION

A. EMERGENCY OVERVIEW:

Physical Appearance and Odor:

white powder solid, odorless.

Warning Statements:

CAUTION! HARMFUL IF INHALED, SWALLOWED OR ABSORBED THROUGH SKIN. CAUSES SKIN AND EYE IRRITATION.

B. POTENTIAL HEALTH EFFECTS:

Acute Eye:

Causes irritation, redness, tearing.

Acute Skin:

Non-irritating. Low acute dermal toxicity.

Acute Inhalation:

Harmful if inhaled. Dusts may cause upper respiratory tract irritation, coughing, wheezing.

Acute Ingestion:

Low acute oral toxicity.

Chronic Effects:

This product contains ingredients that are considered to be probable or suspected human carcinogens (see Section 11 - Chronic). Prolonged contact can cause chronic dermatitis.

4. FIRST AID MEASURES

FIRST AID MEASURES FOR ACCIDENTAL:

Eye Exposure:

Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

Skin Exposure:

In case of contact, wash with plenty of soap and water. Seek medical attention if irritation develops or persists.

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4. FIRST AID MEASURES (Continued)

Inhalation:

Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR (cardio-pulmonary resuscitation). Seek medical attention.

Ingestion:

If victim is conscious and alert, give 2-3 glasses of water to drink and induce vomiting by touching back of throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease. Adverse effects may arise if taking: alcohol.

NOTES TO PHYSICIAN:

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

Flash Point:

Not Applicable

Extinguishing Media:

Not combustible. Use extinguishing method suitable for surrounding fire.

Special Fire Fighting Procedures:

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Dike area to prevent runoff and

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5. FIRE FIGHTING MEASURES (Continued)

contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards:

Under fire conditions, toxic, corrosive fumes are emitted.

Hazardous Decomposition Materials (Under Fire Conditions):

oxides of nitrogen oxides of sulfur oxides of carbon

6. ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and Safety:

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Containment of Spill:

Follow procedure described below under Cleanup and Disposal of Spill.

Cleanup and Disposal of Spill:

Scrape up and place in appropriate closed container (see Section 7: Handling and Storage). Collect washings for disposal. Decontaminate tools and equipment following cleanup. Avoid creation of dusty conditions.

Environmental and Regulatory Reporting:

If spilled on the ground, the affected area should be scraped clean and placed in a appropriate container for disposal. Do not flush to drain. Prevent material from entering public sewer system or any waterways. Dispose of as a hazardous waste.

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures:

Not Available

Handling:

End of Page

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STEL

STEL

7. HANDLING AND STORAGE (Continued)

Do not get on skin or in eyes. Do not breathe dusts. Do not ingest.

Storage:

Store in an area that is away from food, feedstuffs, fertilizers and seed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

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ACGIH 1 mg/cu m 5 mg/cu m

TALC

ACGIH 2 mg/cu m 2 mg/cu m 2 mg/cu m



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

Engineering Controls:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures.

Respiratory Protection:

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s): Air-purifying (half-mask/full-face) respirator with cartridges/canister approved for use against dusts, mists and fumes, pesticides.

Under conditions immediately dangerous to life or health, or emergency conditions with unknown concentrations, use a full-face positive pressure air-supplied respirator equipped with an emergency escape air supply unit or use a self-contained breathing apparatus unit.

Eye/Face Protection:

Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

Skin Protection:

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., shirts and pants). Consideration must be given both to durability as well as permeation resistance.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

(1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

(2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

(3) Wash exposed skin promptly to remove accidental splashes of contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Physical Appearance: white powder solid.

Odor:

odorless.

pH:

Not Applicable

Specific Gravity:

Not Available

Water Solubility:

insoluble

Melting Point Range:

Not Available

Boiling Point Range:

Not Available

Vapor Pressure:

Not Available

Vapor Density:

Not Available

Molecular Weight:

185.24



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10. STABILITY AND REACTIVITY

Chemical Stability:

This material is stable under normal handling and storage conditions described in Section 7.

Conditions To Be Avoided:

none known

Materials/Chemicals To Be Avoided:

strong oxidizing agents

The Following Hazardous Decomposition Products Might Be Expected:

Decomposition Type: thermal

oxides of nitrogen oxides of sulfur

Hazardous Polymerization Will Not Occur.

Avoid The Following To Inhibit Hazardous Polymerization:

not applicable

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation:

Toxicological Information and Interpretation

eye - eye irritation, rabbit. Slightly irritating.

Acute Skin Irritation:

Toxicological Information and Interpretation

skin - skin irritation, rabbit. Non-irritating.

Acute Dermal Toxicity:

Toxicological Information and Interpretation

LD50 - lethal dose 50% of test species, > 2000 mg/kg, rabbit.

Acute Respiratory Irritation:

No test data found for product.

Acute Inhalation Toxicity:

Toxicological Information and Interpretation



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11. TOXICOLOGICAL INFORMATION (Continued)

LC50 - lethal concentration 50% of test species, > 5.27 mg/l/4 hr, rat.

Acute Oral Toxicity:

Toxicological Information and Interpretation

LD50 - lethal dose 50% of test species, > 5000 mg/kg, rat.

Chronic Toxicity:

This product contains the substances that are considered to be "probable" or "suspected" human carcinogens as follows:

Ingredient Name

Regulatory Agency Listing Carcinogen
OSHA IARC NTP ACGIH
NO 1 NO NO

No additional test data found for product.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

For ecotoxicological data call the product information phone number listed in Section 1.

Chemical Fate Information:

For chemical fate data call the product information phone number listed in Section 1.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

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13. DISPOSAL CONSIDERATIONS (Continued)

Container Handling and Disposal:

DO NOT REUSE CONTAINERS.

Any containers or equipment used should be decontaminated immediately after use.

Consult state and local regulations regarding the proper disposal of container.

EPA Hazardous Waste - YES

14. TRANSPORTATION INFORMATION

For Transportation Regulatory Information call the Product Information phone number in Section 1.

15. REGULATORY INFORMATION

FEDERAL REGULATIONS

Inventory Issues:

This product is excluded from TSCA because it is solely for FIFRA regulated use.

SARA Title III Hazard Classes:

Fire Hazard - NO
Reactive Hazard - NO
Release of Pressure - NO
Acute Health Hazard - YES
Chronic Health Hazard - YES

SARA Extremely Hazardous Substances (EHS)/CERCLA Hazardous Substances
Ingredient CERCLA/SARA RQ SARA EHS TPQ
THIRAM 10 lbs

STATE REGULATIONS:

This product does not contain any components that are regulated under California Proposition 65.



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16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings--NFPA(R):

- 1 Health Hazard Rating -- Slight
- 1 Flammability Rating--Slight
- O Instability Rating -- Minimal

National Paint & Coating Hazardous Materials Identification System--HMIS(R):

- 1 Health Hazard Rating -- Slight
- 1 Flammability Rating--Slight
- O Reactivity Rating--Minimal

Reason for Revisions:

Change and/or addition made to Section 4.

Key Legend Information:

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

TLV - Threshold Limit Value

PEL - Permissable Exposure Limit

TWA - Time Weighted Average

STEL - Short Term Exposure Limit

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

ND - Not determined

RPI - Rhone-Poulenc Established Exposure Limits

Disclaimer:

The information herein is given in good faith but no warranty, expressed or implied, is made.